

62

QIPE

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/09/873,546**

DATE: 06/21/2001  
TIME: 17:30:08

Input Set : A:\05080-1.txt  
Output Set: N:\CRF3\06212001\I873546.raw

ENTERED

3 <110> APPLICANT: Clark, Geoff  
4 Ellis, Chad  
5 Vos, Michelle  
7 <120> TITLE OF INVENTION: Rig: Novel Ras-Related Gene  
9 <130> FILE REFERENCE: NIH-05080  
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/873,546  
C--> 11 <141> CURRENT FILING DATE: 2001-06-04  
11 <160> NUMBER OF SEQ ID NOS: 15  
13 <170> SOFTWARE: PatentIn version 3.0  
15 <210> SEQ ID NO: 1  
16 <211> LENGTH: 4  
17 <212> TYPE: PRT  
18 <213> ORGANISM: Artificial Sequence  
20 <220> FEATURE:  
21 <223> OTHER INFORMATION: Synthetic  
23 <220> FEATURE:  
24 <221> NAME/KEY: SITE  
25 <222> LOCATION: (4)..(4)  
26 <223> OTHER INFORMATION: Xaa at this position can be any amino acid.  
29 <400> SEQUENCE: 1  
31 Cys Ala Ala Xaa  
32 1  
34 <210> SEQ ID NO: 2  
35 <211> LENGTH: 33  
36 <212> TYPE: DNA  
37 <213> ORGANISM: Artificial Sequence  
39 <220> FEATURE:  
40 <223> OTHER INFORMATION: Synthetic  
42 <400> SEQUENCE: 2  
43 gggggatcca tgccggaaca gagtaacgat tac  
46 <210> SEQ ID NO: 3  
47 <211> LENGTH: 31  
48 <212> TYPE: DNA  
49 <213> ORGANISM: Artificial Sequence  
51 <220> FEATURE:  
52 <223> OTHER INFORMATION: Synthetic  
54 <400> SEQUENCE: 3  
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58 <210> SEQ ID NO: 4  
59 <211> LENGTH: 597  
60 <212> TYPE: DNA  
61 <213> ORGANISM: Homo sapiens  
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66 agctcgctgg tgctgcgtt cgtgaaggc acgttccgc acacctacat cccaccatc  
68 gaggacacct accggcagg t gatcagctgc gacaagagcg t gtcacgct gca gatcaca  
70 qacaccaccq qcaqccacca qttccccqcc atqcaqcqcc t gtcacatctc caaqqqccac

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72	gccttcatcc	tggtgttctc	cgtcaccagc	aagcagtcgc	tggaggagct	ggggcccatc	300
74	tacaagctca	tcgtgcagat	caagggcagc	gtggaggaca	tcccggtat	gctcggtggc	360
76	aacaagtgcg	atgagacgca	gccccggatgt	gacacgcgcg	aggcgcaggc	ggtggcccaa	420
78	gagtggaaat	gcgcgttcat	ggagacctcg	gccaagatga	actacaacgt	caaggagctc	480
80	ttccaggago	tgctgacgct	ggagacgcgc	cggaacatga	gcctcaacat	cgacggcaag	540
82	cgctccggga	agcagaagag	gacagaccgc	gtcaaggca	aatgcaccct	catgtga	597
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86	<211>	LENGTH: 198					
87	<212>	TYPE: PRT					
88	<213>	ORGANISM: Homo sapiens					
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95	Gly Val Gly Lys Ser Ser Leu Val Leu Arg Phe Val Lys Gly Thr Phe						
96	20	25	30				
98	Arg Asp Thr Tyr Ile Pro Thr Ile Glu Asp Thr Tyr Arg Gln Val Ile						
99	35	40	45				
101	Ser Cys Asp Lys Ser Val Cys Thr Leu Gln Ile Thr Asp Thr Thr Gly						
102	101	50	55	60			
104	Ser His Gln Phe Pro Ala Met Gln Arg Leu Ser Ile Ser Lys Gly His						
105	104	65	70	75	80		
107	Ala Phe Ile Leu Val Phe Ser Val Thr Ser Lys Gln Ser Leu Glu Glu						
108	106	85	90	95			
110	Leu Gly Pro Ile Tyr Lys Leu Ile Val Gln Ile Lys Gly Ser Val Glu						
111	110	100	105	110			
113	Asp Ile Pro Val Met Leu Val Gly Asn Lys Cys Asp Glu Thr Gln Arg						
114	113	115	120	125			
116	Glu Val Asp Thr Arg Glu Ala Gln Ala Val Ala Gln Glu Trp Lys Cys						
117	116	130	135	140			
119	Ala Phe Met Glu Thr Ser Ala Lys Met Asn Tyr Asn Val Lys Glu Leu						
120	119	145	150	155	160		
122	Phe Gln Glu Leu Leu Thr Leu Glu Thr Arg Arg Asn Met Ser Leu Asn						
123	122	165	170	175			
125	Ile Asp Gly Lys Arg Ser Gly Lys Gln Lys Arg Thr Asp Arg Val Lys						
126	125	180	185	190			
128	Gly Lys Cys Thr Leu Met						
129	128	195					
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132	<211>	LENGTH: 21					
133	<212>	TYPE: DNA					
134	<213>	ORGANISM: Artificial Sequence					
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137	<223>	OTHER INFORMATION: Synthetic					
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143	<210>	SEQ ID NO: 7					
144	<211>	LENGTH: 21					
145	<212>	TYPE: DNA					
146	<213>	ORGANISM: Artificial Sequence					

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148 <220> FEATURE:  
149 <223> OTHER INFORMATION: Synthetic  
151 <400> SEQUENCE: 7  
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155 <210> SEQ ID NO: 8  
156 <211> LENGTH: 20  
157 <212> TYPE: PRT  
158 <213> ORGANISM: Artificial Sequence  
160 <220> FEATURE:  
161 <223> OTHER INFORMATION: Synthetic  
163 <400> SEQUENCE: 8  
165 Leu Asn Ile Asp Gly Lys Arg Ser Gly Lys Gln Lys Arg Thr Asp Arg  
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168 Val Lys Gly Lys  
169 20  
171 <210> SEQ ID NO: 9  
172 <211> LENGTH: 229  
173 <212> TYPE: PRT  
174 <213> ORGANISM: Homo sapiens  
176 <400> SEQUENCE: 9  
178 Met Gly Asn Ala Ser Phe Gly Ser Lys Glu Gln Lys Leu Leu Lys Arg  
179 1 5 10 15  
181 Leu Arg Leu Leu Pro Ala Leu Leu Ile Leu Arg Ala Phe Lys Pro His  
182 20 25 30  
184 Arg Lys Ile Arg Asp Tyr Arg Val Val Val Val Gly Thr Ala Gly Val  
185 35 40 45  
187 Gly Lys Ser Thr Leu Leu His Lys Trp Ala Ser Gly Asn Phe Arg His  
188 50 55 60  
190 Glu Tyr Leu Pro Thr Ile Glu Asn Thr Tyr Cys Gln Leu Leu Gly Cys  
191 65 70 75 80  
193 Ser His Gly Val Leu Ser Leu His Ile Thr Asp Ser Lys Ser Gly Asp  
194 85 90 95  
196 Gly Asn Arg Ala Leu Gln Arg His Val Ile Ala Arg Gly His Ala Phe  
197 100 105 110  
199 Val Leu Val Tyr Ser Val Thr Lys Lys Glu Thr Leu Glu Glu Leu Lys  
200 115 120 125  
202 Ala Phe Tyr Glu Leu Ile Cys Lys Ile Lys Gly Asn Asn Leu His Lys  
203 130 135 140  
205 Phe Pro Ile Val Leu Val Gly Asn Lys Ser Asp Asp Thr His Arg Glu  
206 145 150 155 160  
208 Val Ala Leu Asn Asp Gly Ala Thr Cys Ala Met Glu Trp Asn Cys Ala  
209 165 170 175  
211 Phe Met Glu Ile Ser Ala Lys Thr Asp Val Asn Val Gln Glu Leu Phe  
212 180 185 190  
214 His Met Leu Leu Asn Tyr Lys Lys Pro Thr Thr Gly Leu Gln Glu  
215 195 200 205  
217 Pro Glu Lys Lys Ser Gln Met Pro Asn Thr Thr Glu Lys Leu Leu Asp  
218 210 215 220  
220 Lys Cys Ile Ile Met

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221 225  
223 <210> SEQ ID NO: 10  
224 <211> LENGTH: 206  
225 <212> TYPE: PRT  
226 <213> ORGANISM: Homo sapiens  
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231 1 5 10 15  
233 Val Ile Met Val Gly Ser Gly Gly Val Gly Lys Ser Ala Leu Thr Leu  
234 20 25 30  
236 Gln Phe Met Tyr Asp Glu Phe Val Glu Asp Tyr Glu Pro Thr Lys Ala  
237 35 40 45  
239 Asp Ser Tyr Arg Lys Lys Val Val Leu Asp Gly Glu Glu Val Gln Ile  
240 50 55 60  
242 Asp Ile Leu Asp Thr Ala Gly Gln Glu Asp Tyr Ala Ala Ile Arg Asp  
243 65 70 75 80  
245 Asn Tyr Phe Arg Ser Gly Glu Gly Phe Leu Cys Val Phe Ser Ile Thr  
246 85 90 95  
248 Glu Met Glu Ser Phe Ala Ala Thr Ala Asp Phe Arg Glu Gln Ile Leu  
249 100 105 110  
251 Arg Val Lys Glu Asp Glu Asn Val Pro Phe Leu Leu Val Gly Asn Lys  
252 115 120 125  
254 Ser Asp Leu Glu Asp Lys Arg Gln Val Ser Val Glu Glu Ala Lys Asn  
255 130 135 140  
257 Arg Ala Glu Gln Trp Asn Val Asn Tyr Val Glu Thr Ser Ala Lys Thr  
258 145 150 155 160  
260 Arg Ala Asn Val Asp Lys Val Phe Phe Asp Leu Met Arg Glu Ile Arg  
261 165 170 175  
263 Ala Arg Lys Met Glu Asp Ser Lys Glu Lys Asn Gly Lys Lys Arg  
264 180 185 190  
266 Lys Ser Leu Ala Lys Arg Ile Arg Glu Arg Cys Cys Ile Leu  
267 195 200 205  
269 <210> SEQ ID NO: 11  
270 <211> LENGTH: 184  
271 <212> TYPE: PRT  
272 <213> ORGANISM: Homo sapiens  
274 <400> SEQUENCE: 11  
276 Met Arg Glu Tyr Lys Leu Val Val Leu Gly Ser Gly Gly Val Gly Lys  
277 1 5 10 15  
279 Ser Ala Leu Thr Val Gln Phe Val Gln Gly Ile Phe Val Glu Lys Tyr  
280 20 25 30  
282 Asp Pro Thr Ile Glu Asp Ser Tyr Arg Lys Gln Val Glu Val Asp Cys  
283 35 40 45  
285 Gln Gln Cys Met Leu Glu Ile Leu Asp Thr Ala Gly Thr Glu Gln Phe  
286 50 55 60  
288 Thr Ala Met Arg Asp Leu Tyr Met Lys Asn Gly Gln Gly Phe Ala Leu  
289 65 70 75 80  
291 Val Tyr Ser Ile Thr Ala Gln Ser Thr Phe Asn Asp Leu Gln Asp Leu  
292 85 90 95

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294 Arg Glu Gln Ile Leu Arg Val Lys Asp Thr Glu Asp Val Pro Met Ile  
295 100 105 110  
297 Leu Val Gly Asn Lys Cys Asp Leu Glu Asp Glu Arg Val Val Gly Lys  
298 115 120 125  
300 Glu Gln Gly Gln Asn Leu Ala Arg Gln Trp Cys Asn Cys Ala Phe Leu  
301 130 135 140  
303 Glu Ser Ser Ala Lys Ser Lys Ile Asn Val Asn Glu Ile Phe Tyr Asp  
304 145 150 155 160  
306 Leu Val Arg Gln Ile Asn Arg Lys Thr Pro Val Glu Lys Lys Lys Pro  
307 165 170 175  
309 Lys Lys Lys Ser Cys Leu Leu Leu  
310 180  
312 <210> SEQ ID NO: 12  
313 <211> LENGTH: 183  
314 <212> TYPE: PRT  
315 <213> ORGANISM: Homo sapiens  
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320 1 5 10 15  
322 Ser Ala Leu Thr Val Gln Phe Val Thr Gly Thr Phe Ile Glu Lys Tyr  
323 20 25 30  
325 Asp Pro Thr Ile Glu Asp Phe Tyr Arg Lys Glu Ile Glu Val Asp Ser  
326 35 40 45  
328 Ser Pro Ser Val Leu Glu Ile Leu Asp Thr Ala Gly Thr Glu Gln Phe  
329 50 55 60  
331 Ala Ser Met Arg Asp Leu Tyr Ile Lys Asn Gly Gln Gly Phe Ile Leu  
332 65 70 75 80  
334 Val Tyr Ser Leu Val Asn Gln Gln Ser Phe Gln Asp Ile Lys Pro Met  
335 85 90 95  
337 Arg Asp Gln Ile Ile Arg Val Lys Arg Tyr Glu Lys Val Pro Val Ile  
338 100 105 110  
340 Leu Val Gly Asn Lys Val Asp Leu Glu Ser Glu Arg Glu Val Ser Ser  
341 115 120 125  
343 Ser Glu Gly Arg Ala Leu Ala Glu Glu Trp Gly Cys Pro Phe Met Glu  
344 130 135 140  
346 Thr Ser Ala Lys Ser Lys Thr Met Val Asp Glu Leu Phe Ala Glu Ile  
347 145 150 155 160  
349 Val Arg Gln Met Asn Tyr Ala Ala Gln Pro Asp Lys Asp Asp Pro Cys  
350 165 170 175  
352 Cys Ser Ala Cys Asn Ile Gln  
353 180  
355 <210> SEQ ID NO: 13  
356 <211> LENGTH: 189  
357 <212> TYPE: PRT  
358 <213> ORGANISM: Homo sapiens  
360 <400> SEQUENCE: 13  
362 Met Thr Glu Tyr Lys Leu Val Val Val Gly Ala Gly Gly Val Gly Lys  
363 1 5 10 15  
365 Ser Ala Leu Thr Ile Gln Leu Ile Gln Asn His Phe Val Asp Glu Tyr

**VERIFICATION SUMMARY**

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Input Set : A:\05080-1.txt

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L:11 M:270 C: Current Application Number differs, Replaced Current Application No

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:31 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1